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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,396	02/28/2002	David B. Wallace	D4865-00004	8099

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EXAMINER

HARTMAN JR, RONALD D

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/085,396

**Applicant(s)**

WALLACE, DAVID B.

**Examiner**

Ronald D. Hartman Jr.

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 17-20 are presented for further examination.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a method that does not require computer implementation or use of technology to accomplish. The claims allow for the involvement of subjective human decision and therefore do not produce repeatable, concrete results.

Therefore, the language of the claims raises a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mowery et al., U.S. Patent No. 5,983,198, in view of Schliefer et al., U.S. Patent No. 4,615,351.

As per claims 17 and 20, Mowery et al teaches a method comprising:

- generating a first signal representative of an existing bulk material quantity at a remote site (e.g. generation of "quantity signals" outputted from sensors which are fitted to the storage containers; Figure 1);
- transmitting a second signal corresponding to the first signal from the remote site to at least one computer at predetermined time intervals (e.g. transmitting a "level signal" from the RTU to the central station; Figure 1);
- determining the existing bulk material quantity and projected material usage rate for the existing bulk material quantity based on the transmitted signals (e.g. Figure 2 elements 206, 208 and 210; C4 L14-20 and C4 L33-45);
- ordering additional bulk materials from a pre-selected vendor based on the existing material quantity and the projected material usage rate (e.g. an order being placed to a shipping terminal; Figure 1);
- providing a transport vehicle to deliver the additional bulk material from the vendor to the manufacturing site (e.g. Figure 1, elements 118 and 102); and
- transporting the additional bulk material from the vendor to the site, whereby additional bulk material is supplied to the site before the existing bulk material is depleted (e.g. C3 L44-50 and C4 L26-32).

As per claims 17 and 20, Mowery et al. does not specifically teach a dry bulk material being monitored.

Schliefer et al. teaches a method of monitoring the surface level of a material in a vessel, wherein the material is in a dry form (e.g. Figure 2; "bulk solid").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Schliefer into the system disclosed by Mowery et al for the purpose of allowing Mowery's system to be utilized in a manufacturing site which uses dry materials stored in bulk so that the level of the

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materials may be known at any point in time, including the future, so that the material quantity can be effectively maintained, monitored and controlled, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

As per claim 20, Mowery et al. further teaches the use of ultrasonic level detectors (e.g. C3 L51-53).

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mowery et al., U.S. Patent No. 5,983,198, in view of Schliefer et al., U.S. Patent No. 4,615,351, in further view of Graves et al., U.S. Statutory Invention registration No. H1743.

As per claim 18, Mowery's combined system does not specifically teach the central computer having a display for displaying existing material quantity and projected usage rates.

Graves et al. teaches the use of a display (e.g. Figure 1 element 114) for displaying existing quantity levels and projected usage (e.g. Figure 4, C6 L18-26 and C12 L45-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Graves et al. into Mowery's combined system for the purpose of allowing an operator to graphically see what the current material quantities are, in addition, to see what the projected usage is, so that an operator may make well informed decisions, such as ordering additional materials, so that the material levels may be replenished without hindering the performance of the manufacturing site, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mowery et al., U.S. Patent No. 5,983,198, in view of Schliefer et al., U.S. Patent No. 4,615,351, in further view of Graves et al., U.S. Statutory Invention registration No. H1743.

As per claim 19, the rejection of claim 17 is equally applied herein.

As per claim 19, Mowery's combined system does not specifically teach producing an audible or visual alarm, via the central computer, when the material level falls below a predetermined level.

Graves et al. teaches a control room alarm box for use in issuing visual or audible alarms when levels in storage fall below a predetermined level (e.g. C9 L30-49 and C11 L37-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Graves et al. into Mowery's combined system for the purpose of providing an indication when quantity levels fall below a predetermined level so that the levels may be replenished without hindering the performance of the manufacturing site, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 17-20 have been considered but are moot in view of the new ground(s) of rejection, which were necessitated by the applicants amendments, and as such, this action is being made **FINAL**.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (571) 272-3684. The examiner can normally be reached on Tues. - Fri., 11:00 am - 9:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

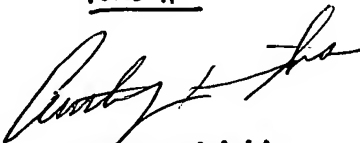
Ronald D Hartman Jr.

Patent Examiner

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XRDH

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**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**